

EXHIBITIONS AND NOTICES.

February 3, 1914.

Sir JOHN ROSE BRADFORD, K.C.M.G., D.Sc., F.R.S.,
Vice-President, in the Chair.

The SECRETARY read the following report on the additions to the Society's Menagerie during the months of November and December, 1913:—

NOVEMBER.

The number of registered additions to the Society's Menagerie during the month of November was 350. Of these 251 were acquired by presentation, 51 by purchase, 19 were received on deposit, 21 in exchange, and 8 were born in the Gardens.

The number of departures during the same period, by death and removals, was 237.

Amongst the additions special attention may be directed to:—

1 White-tailed Guereza (*Colobus caudatus*), from East Africa, new to the Collection, presented by G. St. J. Orde Browne, Esq., on November 3rd.

1 Cheetah (*Cynelurus jubatus*), from East Africa, presented by H.G. The Duke of Sutherland, F.Z.S., on November 7th.

1 Argentine Blackbird (*Merula fuscata*), new to the Collection, presented by R. Suggitt, Esq., on November 12th.

10 White-headed Starlings (*Poliopsar leucocephalus*), from Cochin China, new to the Collection, presented by W. O. Danckwerts, Esq., K.C., F.Z.S., on November 26th.

2 Red-billed Hornbills (*Lophoceros erythrorhynchus*), from Africa, received in exchange on November 11th.

1 Crowned Pigeon (*Goura coronata*), bred in the Menagerie on November 29th.

1 Hybrid between a Black-winged Peacock (*Pavo nigripennis*) and a Domestic Hen (*Gallus domesticus*), presented by R. P. Wheadon, Esq., on November 7th.

2 Kagus (*Rhinocetus jubatus*), from New Caledonia, presented by the Marquess of Tavistock, F.Z.S., on November 1st.

2 Masai Ostriches (*Struthio massaicus*), from East Africa, purchased on November 3rd.

A large Collection of Small Birds and Waterfowl, presented by Heatley Noble, Esq., F.Z.S., on November 24th.

DECEMBER.

The number of registered additions to the Society's Menagerie during the month of December was 166. Of these 89 were acquired by presentation, 31 by purchase, 19 were received on deposit, 26 in exchange, and 1 was born in the Gardens.

The number of departures during the same period, by death and removals, was 277.

Among the additions special attention may be directed to:—

1 Pigmy Hippopotamus (*Chæropsis liberiensis*) ♂, from Liberia, presented by H.G. The Duke of Bedford, K.G., Pres.Z.S., on December 16th.

2 Vicunas (*Lama vicugna*) ♂ ♀, from the Andes, presented by F. Lesser, Esq., on December 20th.

1 Cheetah (*Cynelurus jubatus*) ♀, from British East Africa, presented by Mrs. McMillan, F.Z.S., on December 20th.

1 Pine-Marten (*Mustela martes*), from Kerry, presented by H. G. Constable, Esq., F.Z.S., on December 11th.

3 Four-banded Chipping-Squirrels (*Eutamias quadrivittatus*), new to the Collection, deposited on December 1st.

1 Olive-backed Thrush (*Hylocichla ustulata swainsoni*), from North America, new to the Collection, received in exchange on December 23rd.

A large Collection of Birds, including a pair of Red-collared Lorikeets (*Trichoglossus rubritorques*), a number of Waterfowl and Small Birds, presented by Heatley Noble, Esq., F.Z.S., on December 1st.

4 South-African Ostriches (*Struthio australis*), bred in South Australia, deposited on December 12th.

29 Ornamented Ceratophrys (*Ceratophrys ornata*), from the Argentine, presented by E. G. Robinson, Esq., on December 23rd.

Mr. D. SETH-SMITH, F.Z.S., Curator of Birds, exhibited a photograph of two hybrids between a Peacock and a hen Guinea-fowl which were bred in Germany and were now in the Berlin Zoological Gardens, and remarked that there were three or four cases on record of such hybrids being produced, whereas there were only two instances known of the Peafowl crossing with the domestic fowl, and none, so far as he knew, with birds of any other genus.

Mr. Seth-Smith also showed the skin of a hybrid Pheasant hen, which had been sent to him by Mr. H. J. Elwes, F.R.S. This bird was one of a number bred in Sussex by Mrs. Johnstone, between a cock *Calophasis mikado* and hen *C. ellioti*. It bore a very strong resemblance to the female *C. mikado*, but showed a trace of the black throat and rufous barring to the tail of *C. ellioti*.

Mr. G. A. BOULENGER, F.R.S., F.Z.S., gave an account of the collections of Batrachians and Reptiles made by the British Ornithologists' Union and the Wollaston Expeditions in Dutch New Guinea. Four species of Batrachians and eight species of Reptiles were described as new.

This paper will be published in the 'Transactions.'

February 17, 1914.

Prof. E. A. MINCHIN, M.A., F.R.S., F.Z.S., Vice-President,
in the Chair.

The SECRETARY read the following report on the additions to the Society's Menagerie during the month of January 1914:—

The number of registered additions to the Society's Menagerie during the month of January was 151. Of these 73 were acquired by presentation, 23 by purchase, 23 were received on deposit, and 32 in exchange.

The number of departures during the same period, by death and removals, was 209.

Amongst the additions special attention may be directed to:—

A pair of Park Cattle (*Bos taurus*), from Chillingham, presented by the Earl of Tankerville, F.Z.S., on January 28th.

A pair of Indian Wild Dogs (*Cyon dukhunensis*), from Nagpur, presented by Mrs. H. A. Crump on January 23rd.

1 Brown-shouldered Hangnest (*Icterus pyrrhopterus*), from Brazil, new to the Collection, presented by T. W. Smith, Esq., on January 20th.

2 Cuban Conures (*Conurus euops*), new to the Collection, presented by the Marquess of Tavistock, F.Z.S., on January 23rd.

1 Abingdon-Island Tortoise (*Testudo abingdonii*), from the Galapagos Islands, new to the Collection, purchased on January 12th.

1 Queensland Long-necked Terrapin (*Chelodina expansa*), from Queensland, new to the Collection, purchased on January 19th.

A Hybrid Sea-Lion.

Mr. GEORGE JENNISON sent for exhibition a mounted specimen of a hybrid Sea-Lion (*Otaria pusilla* ♂ × *O. californiana* ♀), which had been born in the Belle Vue Gardens, Manchester, together with photographs of another specimen now living in the same Gardens, and the following notes:—

“Both the parents, *O. pusilla* ♂ and *O. californiana* ♀, arrived here as immature specimens. The male had been over four years, the female six years in the Collection when the first pup was born in June, 1911. It was found dead. The next one, in 1912, lived only about a day. It was taken from the parents who were tossing it about. The keeper (J. Craythorne) came to the conclusion that the ill-treatment was nervousness and excessive solicitude, and accordingly separated the female a few days before the next birth was expected, and prepared a corner fenced from the water into which he took the pup—they are always born on land—when it was born on June 15th, 1913. The mother followed the little

one, pushed the pup with her head until it found the teats, and the rearing has presented no difficulty. A few interesting features presented themselves.

"On June 21st I had the partition removed, and the pup immediately went into the water and continued to return there, although the mother threw it out by the neck repeatedly, finally in so rough a manner as to endanger its life. June 28th, the pup climbed over the two-foot fence. This was then raised to three feet, which was beyond its powers. The keeper tells me that on July 2nd the mother carried the pup by the neck to the water, kept it in the tank and on the side for half an hour, and then carried it back to the safe retreat. Neither then nor subsequently did I see this interesting sight. And later the mother seemed rather careless of the young one when in the water. An occasional bath seemed necessary, and as the little one had no notion of surmounting the three inches from the water to the side of the bath, the keepers had to watch his swim—he is a male—and then lift him out, a duty that increased in difficulty as he grew stronger and, strangely enough, more shy.

"At five months old it learned to leap out. At six months it began to play with fish given to the mother, and after a fortnight it ate a little. It still sucks. It is very lively in the water, fond of swimming on its back and stroking its nose with the fore flippers, a trait common to Cape Sea-Lions which I have never noticed among the Californians. The pup has a pearly-grey pelage; the head is round and well bombed, and the whole animal bears a close resemblance to the male parent.

"The adult animals are kept in the open with free access to a shelter which they never use.

"The male is usually in the water and generally drives the female out very quickly. This hostility is suspended in severe weather, when both animals swim continually to keep the ice from forming."

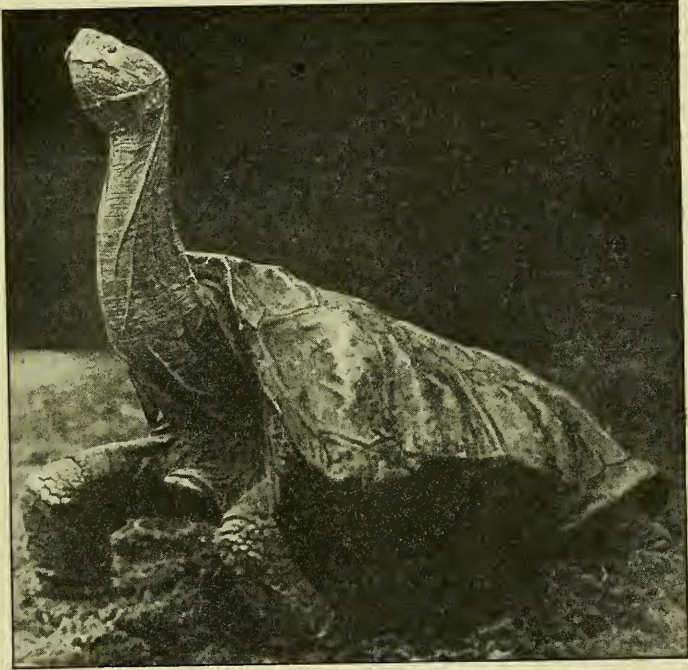
Giant Saddle-backed Tortoise.

Mr. E. G. BOULENGER, F.Z.S., Curator of Reptiles, exhibited a photograph (text-fig. 1) of a female example* of the Giant Saddle-backed Tortoise (*Testudo abingdonii*), recently purchased by the Society. On the arrival of the tortoise, the origin of which was unknown, Mr. Boulenger was somewhat puzzled as to the species to which it should be referred, but, on carefully comparing it with the Saddle-backed Tortoises in the British Museum, came to the conclusion that the specimen was none other than the hitherto unknown female of *T. abingdonii*, a species which had never previously been brought to Europe alive, and which was thought to be extinct. An inspection of the very representative collection of Giant Tortoises in the Tring Museum strengthened the conclusion arrived at.

* [The tortoise has since died, and turned out to be a male.—EDITOR, P. Z. S.]

From the few male specimens in museums this tortoise differs by the fore part of the shell being less strongly compressed and not reaching the same height, more as in *T. ephippium*, by the comparatively greater breadth of the hinder part of the carapace, by the broader bridge, and by the smaller size of the marginals bordering the bridge.

Text-figure 1.

Giant Saddle-backed Tortoise (*Testudo abingdonii*).*Measurements.*

	Inches.
Length of carapace in straight line	25
Length of carapace over curve	27
Width of carapace in straight line.....	17
Width of carapace over curve.....	27
Width of hinder part of carapace in straight line } (from centre of 9th marginal).....	17
Width of hinder part of carapace over curve	20 $\frac{1}{2}$
Vertical height in front	9 $\frac{3}{4}$
Length of plastron	19
Width of plastron	16 $\frac{1}{2}$
Width of bridge	10
Depth of marginals, bordering bridge	4

Mr. Boulenger pointed out that the neck, which exactly equalled the shell in length, was not as represented in the single stuffed specimen in the British Museum, without any folds, but that the skin was loose, with numerous folds, a pair of very strong lateral ones extending from the sides of the head down almost the entire length of the neck.

The tortoise, although very lively, is extremely shy, and on one's approach has the peculiar habit of withdrawing its head, standing as high up as possible on its hind limbs, and bending over until the fore part of the carapace almost touches the ground. The purpose of this performance seems to be in order to protect the head and neck which, owing to the peculiar shape of the front part of the shell, remain completely exposed on withdrawal.

The shell in this species being of extraordinary thinness and lightness, the creature is able to progress at a pace which, compared with that of the other tortoise in the collection, is remarkable for its rapidity.

Helminthes of the British Antarctic Expedition, 1910-1913.*

Dr. R. T. LEIPER, M.B., F.Z.S., and Surgeon E. L. ATKINSON, R.N., gave a lantern demonstration of the Helminthes collected by the British Antarctic ('Terra-Nova') Expedition, 1910-1913. In all, thirty-seven species of Helminthes were collected by Surgeon Atkinson on the voyage of the 'Terra-Nova,' and whilst a member of the shore party. One species was a free-living Nematode, *Leptosomatum setosum*, the remainder were parasitic. Of these latter,

8 species had been recorded from the Antarctic zone, viz.:—

In *Leptonychotes weddelli*:

Ascaris osculata Rud.

Ascaris radiata v. Linstow.

Ascaris rectangula v. Linstow.

Corynosoma antarcticum Rennie (= *C. hamanni* v. L.).

Dibothriocephalus mobilis Rennie & Reid.

Dibothriocephalus coatsi Rennie & Reid.

Diphyllobothrium perfoliatum Railliet & Henry.

In *Aptenodytes forsteri*:

Anomotenia zederi (Baird).

Free-living Nematode:

Leptosomatum setosum v. Linstow.

* From the Helminthological Department of the London School of Tropical Medicine.

3 species previously found in the Arctic zone are now recorded from the Antarctic for the first time, viz. :—

In *Megaptera longimana* :

Filaria crassicauda Creplin.

Echinorhynchus turbinella Dies.

In *Leptonychotes weddelli* :

Ogmogaster plicatus (Creplin). This species is a parasite of whales in northern seas.

1 species recorded outside the Antarctic zone has now been found within the Circle, viz. :—

In *Megalestris maccormicki* :

Tetrabothrius cylindraceus Dies.

15 species found within the Antarctic circle are new, viz. :—

NEMATODA.

KATHLEENA SCOTTI, sp. n., from *Diomedea melanophrys*.

An Ascarid nearly related to *Ascaris osculata* which is designated type, *infra*, of a new genus *Kathleena*.

Whitish, firm, round-worms. Male 15×0.9 mm. Female the same or slightly larger. Interlabia very large, pentagonal. Short-curved œsophageal appendage 0.2 mm. Intestinal cæcum 1.8 mm. Œsophagus 2.53×0.4 mm. Spicules 3×2.7 mm. Tail of male terminates in blunt digitate process.

ACANTHOCEPHALA.

ECHINORHYNCHUS CAMPBELLI, sp. n., from *Trematomus bernacchii*.

Male 9 mm. Female 10 mm. Thin-walled. 2.5 mm. broad. Proboscis 2 mm. Hook-bearing rostellum 0.5 mm. Hooks 14 linear series of 8 hooks each. Testes oval, occupy the third fourth of the body.

ECHINORHYNCHUS RENNICKI, sp. n., from *Trematomus bernacchii*.

Male 3.7 mm. Female 4 mm. Proboscis 1 mm. Hook-bearing rostellum 0.3 mm. Hooks in 12 linear series of 6 each. Those of alternate rows are in line transversely. Each hook protrudes from a transparent cuticular lapel. Lemnisci are long and slender.

ECHINORHYNCHUS DEBENHAMI, sp. n., from *Trematomus bernacchii*.

Male 2.2 mm. Female 2.2 mm. Sickle-shaped. Stout, cylindrical rostellum with hooks in 12 linear series of 6 each. Lemnisci bag-like, extending but little behind proboscis. Testes large, occupying anterior half of body-cavity, deeply lobed. Female crowded with eggs.

TREMATODA.

HEMIURUS OATESI, sp. n., from *Trematomus bernacchii*.

Length 2 mm. Abdomen present but retracted wholly. Skin sharply striated. Ventral sucker 0.34 mm. diam., twice that of oral sucker. Enormous muscular seminal vesicle. Yolk-masses compact, lobulated. Eggs exceedingly numerous and small.

APONURUS BOWERSI, sp. n., from *Trematomus bernacchii*.

Length 1 mm. Oral sucker has characteristic fleshy lip along dorsal rim only. Gut-branches greatly dilated extend to posterior end of body. The yolk-glands are peculiar: two halfmoon-shaped solid masses lying in apposition immediately in front of the ovary.

LEPODORA GARRARDI, sp. n., from *Trematomus bernacchii*.

Flat fleshy forms 3×0.9 mm. Brownish colour due to numerous yolk-glands. Skin covered with delicate spines. Ventral sucker 0.27 mm., oral sucker 0.37 mm. Stout pyriform pharynx 0.2 mm. Eggs few but large. Testes tandem. Gut-branches wide and extending to posterior end of body.

PODOCOTYLE PENNELLI, sp. n., from *Trematomus bernacchii*.

Small forms tapering from large pouting ventral sucker. Armed cirrus extends to posterior level of the ventral sucker. Yolk-glands large and discrete. Testes smooth, tandem. Eggs large, with flat knob-like protrusion at one pole.

ALLOCREADIUM FOWLERI, sp. n., from *Trematomus bernacchii*.

Immature forms 0.74 mm. in length, 0.4 mm. broad. Skin smooth. Cylindrical excretory vesicle with fine black pigment granules. Large ventral sucker 0.36 mm. Three small round bodies 0.1 mm. in diam. represent the genital glands.

CESTODA.

DIBOTHRIOCEPHALUS LASHLEYI, sp. n., from *Leptonychotes weddelli*.

3 to 4 cms. Young segments quadrate. Mature segments 3 to 4 times longer than broad. Head 1.2 mm. long \times 0.77 mm. broad. Suckers, situated laterally, are almost circular and do not extend much down the head. Eggs commence at 14th segment, 0.06 mm. The testes extend inward in each segment in single series of three.

DIBOTHRIOCEPHALUS ARCHERI, sp. n., from *Leptonychotes weddelli*.

6 to 12 cms. Large square head 2.04 mm. broad. Lips of the suckers folded inwards. Eggs start at 57th segment and measure 0.07 mm. Testes scattered diffusely.

DIPHYLLOBOTHRUM RUFUM, sp. n., from *Leptonychotes weddelli*.

3 to 6 cms. The head is characteristically pigmented brick-red around the base of the suckers. Head measures 1.64×1.44 mm.

Suckers are dorsal and ventral. The segments overlap markedly as in *D. perfoliatum*. Eggs measure 0.025 mm.

ORIANA WILSONI, gen. et sp. n., from *Balenoptera borealis*.

Segments all immature. Strobila 13 cms. Head discoidal, 3 mm. in diam., quadrate in outline, 4 round suckers present terminally. Neck very slender. Testes arranged in two definite groups of 7-8 and 17-18. Near to *Diplobothrium*.

TETRABOTHRIUS WRIGHTI, sp. n., from *Pygoscelis adeliæ*.

Strobila 2.2 mm., but none contains eggs. Head 0.4 mm. in length. Testes constantly twelve, auricular appendages of suckers well developed.

ANTHOBOTHRIUM WYATTI, sp. n., from *Trematomus bernacchii*.

Small scolices, unsegmented. Four large auricular appendages each occupied by two tandem suckers. A bright pigmented band crosses the neck in the living state.

9 species were collected in Tropical and Temperate Zones during the voyage of the 'Terra-Nova.' Of these three have been recorded previously, viz. :—

ABOTHROS CARCHARIAS and a larval TETRARHYNCHUS from *Carcharias* sp., and TETRABOTHRIUS HETEROCLITUS Dies. from *Puffinus cinereus*.

Five Cestodes, all of the genus TETRABOTHRIUS, are new, viz. :—

TETRABOTHRIUS CREANI, sp. n., from *Æstrelata trinitatis* and *Æ. arminjoniana*.

Strobila 4.5 cms. Head 0.84 mm. broad, carries four suckers but no rostellum. Testes are numerous. Yolk-gland large. Cirrus 0.06 mm.

TETRABOTHRIUS CATHERINÆ, sp. n., from *Æstrelata trinitatis*.

Stouter than preceding. Head comparatively small. Suckers most on top of head. Segments overlap succeeding segments by one-third. Testes 30 to 45, bunched in middle of segment. Genital organs very characteristic. Cloaca divided into outer and inner portions. There is a large pyriform seminal vesicle internal to the cirrus.

TETRABOTHRIUS AICHESONI, sp. n., from *Æstrelata trinitatis*.

Strobila 3 cms. More slender than preceding. Segments more uniform, only overlap slightly. Testes arranged in three distinct sets, are very numerous, far in excess of those of the previous forms.

TETRABOTHRIUS PRIESTLEYI, sp. n., from a Frigate-bird (*Fregata aquila* or *F. ariel*).

Strobila 10 cms., excessively slender with large tulip-like heads. Testes 17-20. Near to *T. pelecani* Fuhrmann.

TETRABOTHRIUS NELSONI, sp. n., from *Phæbetria palpebrata*.

Fragments only. Head absent. Testes 6 to 8, clumped at opposite side of segment from the cirrus.

One Nematode is new and the type of a new genus:—

TERRANOVA ANTARCTICA, from *Mustelus antarcticus*.

A single Ascarid female 32 mm. long. Three squat fleshy lips with paired anterior lobes. No labia intermedia. Œsophagus without appendage. The intestine has a long cæcum. The anus lies at the base of a deep sulcus.

The following new genera are proposed:—

CRASSICAUDA, gen. n., for *Filaria crassicauda* (Creplin), t. sp.

TERRANOVA, gen. n., for *Terranova antarctica*, sp. n., t. sp.

An Ascarid with three large simple lips. No interlabia. Œsophagus simple. Gut with anterior cæcal prolongation. No œsophageal appendage.

KATHLEENA, gen. n., for *Ascaris osculata* Rud., t. sp.

An Ascarid with three large fleshy lips and three interlabia. Œsophagus has a solid appendage and the intestine has an anterior cæcal prolongation. In this genus may also be placed *Ascaris radiata*, *A. rectangula*, and *K. scotti*.

ORIANA, gen. n., for *Oriana wilsoni*, sp. n., t. sp. (*vide supra*).

Cyclophyllid with large quadrate discoidal head carrying four round suckers. Rostellum absent.

The types of the above forms are in the British Museum (Natural History), London. An illustrated account of the collection will appear in one of the zoological volumes of the results of the Expedition, to be published by the Trustees of the Museum.

March 3, 1914.

Prof. E. W. MACBRIDE, M.A., D.Sc., F.R.S., Vice-President.
in the Chair.

Mr. C. TATE REGAN, M.A., F.Z.S., reported on the fresh-water fishes from Dutch New Guinea collected by the British Ornithologists' Union and the Wollaston Expeditions. *Symbranchus bengalensis* was obtained for the first time in New Guinea. The collections included examples of two species of Melanotæniine Atherinids, and Mr. Regan had revised this group of fishes.

This paper will be published in the 'Transactions.'